

CLAIMS

This is a complete and current listing of the current claims marked with status identifiers in parentheses.

1. (Original) A method for the providing of a plant belonging to the Brassica family with elevated levels of anticarcinogenic glucosinolates, comprising:
 - a) providing a cultivated Brassica oleracea plant with elevated levels of anticarcinogenic glucosinolates in the edible parts of the Brassica oleracea plant;
 - a) the use of the Brassica oleracea plant provided under a) as the starting material for the breeding of Brassica varieties with elevated levels of anticarcinogenic glucosinolates, wherein the anticarcinogenic glucosinolates comprise at least glucoiberin (3-methylsulphinylpropyl glucosinolate (3MSPG)) and/or glucoraphanin (4- methylsulphinylpropyl glucosinolate (4MSBG)), and wherein the concentration of 3MSPG per 100 gram of fresh weight of the edible part is greater than 100 micromol and the concentration of 4MSBG per 100 gram of fresh weight of the edible part is greater than 50 micromol.
2. (Original) The method according to claim 1, wherein the concentration of 3MSPG per 100 gram of fresh weight of the edible part is greater than 280 micromol.
3. (Previously Presented) The method according to claim 1, wherein the concentration of 3MSPG per 100 gram of fresh weight of the edible part is greater than 390 micromol.
4. (Previously Presented) The method according to claim 1, wherein the concentration of 3MSPG per 100 gram of fresh weight of the edible part is greater than 790 micromol.

5. (Original) The method according to claim 1, wherein the concentration of 4MSBG per 100 gram of fresh weight of the edible part is greater than 120 micromol.

6. (Original) The method according to claim 5, wherein the concentration of 4MSBG per 100 gram of fresh weight of the edible part is greater than 140 micromol.

7. (Previously Presented) The method according to claim 1, wherein the cultivated Brassica oleracea plant is broccoli sprout (Brassica oleracea convar. botrytis var. asparagoides).

8. (Original) The method according to claim 7, wherein the broccoli sprout (Brassica oleracea convar. botrytis var. asparagoides) variety is Bordeaux.

9. (Previously Presented) The method according to claim 1, wherein the cultivated Brassica oleracea plant is Savoy cabbage (Brassica oleracea convar. capitata var. sabauda).

10. (Original) The method according to claim 9, wherein the Savoy cabbage (Brassica oleracea convar. capitata var. sabauda) variety is Wirosa.

11. (Previously Presented) The method according to claim 1, wherein the cultivated Brassica oleracea plant is broccoli (Brassica oleracea convar. botrytis var. cymosa).

12. (Original) The method according to claim 11, wherein the broccoli (Brassica oleracea convar. botrytis var. cymosa) variety is Belstar or Coronado.

13. (Previously Presented) The method according to claim 1, wherein the plant belonging to the Brassica family is selected from the group consisting of cauliflower or romanesco (Brassica oleracea convar. botrytis var. botrytis); broccoli

(Brassica oleracea convar. botrytis var. cymosa); broccoli sprout (Brassica oleracea convar. botrytis var. asparagoides); Brussels sprouts (Brassica oleracea convar. oleracea var. gemmifera); white cabbage or oxheart cabbage (Brassica oleracea convar. capitata var. alba); red cabbage (Brassica oleracea convar. capitata var. rubra); Savoy cabbage (Brassica oleracea convar. capitata var. sabauda); kohlrabi (Brassica oleracea convar. acephala var. gongyloides); kale (Brassica oleracea convar. acephala var. sabellica); and Portuguese cabbage (Brassica oleracea var. tronchuda syn. costata).

14. (Previously Presented) A plant belonging to the Brassica family obtainable by the method of claim 1.

15. (Previously Presented) Seeds of a plant belonging to the Brassica family obtainable by the method of claim 1.

16. (Previously Presented) Parts of a plant belonging to the Brassica family obtainable the method of claim 1.

17. (Previously Presented) The use of the plant according to claim 14 for the preparation of a food product and/or pharmaceutical composition for prophylaxis and/or treatment of cancer.

18. (Previously Presented) The use of the seeds according to claim 15 for the preparation of a food product and/or pharmaceutical composition for prophylaxis and/or treatment of cancer.

19. (Previously Presented) The use of the parts of a plant according to claim 16 for the preparation of a food product and/or pharmaceutical composition for prophylaxis and/or treatment of cancer.

20. (Previously Presented) The method according to claim 2, wherein the concentration of 3MSPG per 100 gram of fresh weight of the edible part is greater than 390 micromol.